

Run on:	April 23, 2003, 07:28:09 ;	Search time 50 seconds	283224			
Copyright (c) 1993 - 2003	Compugen Ltd.	(without alignment)	1543.919 Million cell updates/sec			
Title:	US-10-034-849-2					
Perfect score:	4188					
Sequence:	1 MTEUVFTWIDSSYEVGKEP... . . . . . LKASATGQKTLDFPLAKKSK 803					
Scoring table:	BLOSUM62					
	Gapop 10.0 , Gapext 0.5					
Searched:	283224 seqs, 96134422 residues					
Total number of hits satisfying chosen parameters:	283224					
Minimum DB seq length: 0						
Maximum DB seq length: 2000000000						
Post-processing:	Minimum Match 0%					
	Maximum Match 100%					
Database :	PIR-73;*					
	1: pir1;*					
	2: pir2;*					
	3: pir3;*					
	4: pir4;*					
Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.						
SUMMARIES						
Result No.	Score	Query Match	Length			
		Best Local Similarity	Score			
		Matches 571; Conservative 106; Mismatches 121; Indels 7; Gaps 5;	3033.5; DB 2; Length 803;			
		Description				
1	3033.5	72.4	803	2	B56277	RESULT 1
2	2434	58.1	784	2	B56275	DNA-directed DNA polymerase (BC 2.7.7.7) II - Pyrodictium occultum
3	2246	53.6	781	2	JCT382	C;Species: Pyrodictium occultum
4	1581	37.8	781	2	A65312	C;Date: 03-Oct-1995 #sequence_revision 03-Oct-1995 #text_change 20-Jun-2000
						C;Accession: B56277
						R;Taxon: T; Ishino, Y.; Doi, H.; Kato, I.
						J;Bacteriol: 177, 2164-2177, 1995
						A;Title: The hyperthermophilic archaeon Pyrodictium occultum has two alpha-like DNA po
						A;Reference number: A56277; MUID:95238290; PMID:7721707
						A;Accession: B56277
						A;Status: preliminary
						A;Molecule type: DNA
						A;Residues: 1-803 <UEM>
						A;Cross-references: GB:D38574; NID:9807829; PIDN:BA007580.1; PID:9807830
						C;Superfamily: herpesvirus DNA-directed DNA polymerase
						C;Keywords: nucleotidyltransferase
						Query Match 72.4%; Score 3033.5; DB 2; Length 803;
						Best Local Similarity 70.9%; Pred. No. 1.4e-176; Mismatches 121; Indels 7; Gaps 5;
						Matches 571; Conservative 106; Mismatches 121; Indels 7; Gaps 5;
						Query Match 72.4%; Score 3033.5; DB 2; Length 803;
						Best Local Similarity 70.9%; Pred. No. 1.4e-176; Mismatches 121; Indels 7; Gaps 5;
						Matches 571; Conservative 106; Mismatches 121; Indels 7; Gaps 5;
						Query Match 72.4%; Score 3033.5; DB 2; Length 803;
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						Matches 571; Conservative 106; Mismatches 121; Indels 7; Gaps 5;
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						Matches 571; Conservative 106; Mismatches 121; Indels 7; Gaps 5;
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						Best Local Similarity 70.9%; Pred. No. 1.4e-176; Mismatches 121; Indels 7; Gaps 5;
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						Matches 571; Conservative 106; Mismatches 121; Indels 7; Gaps 5;
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						Matches 571; Conservative 106; Mismatches 121; Indels 7; Gaps 5;
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						Matches 571; Conservative 106; Mismatches 121; Indels 7; Gaps 5;
						Query Match 72.4%; Score 3033.5; DB 2; Length 803;
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## BEST AVAILABLE COR

Best Local Similarity 70.8\*, Pred. No. 1e-270:  
 Matches 570; Conservative 106; Mismatches 122; Index 7; Gaps 5;

Qy 421 AIVVERPLRGHENIAVLDSSMSYNNIMIKRNGPDTLVRGKCGCGWAPVKHFR 480  
 Db 421 AIVVERPLRGHENIAVLDSSMSYNNIMIKRNGPDTLVRGKCGCGWAPVKHFR 480

Qy 481 RCPPGPKVTLERLLELRKVRRAENKKYPPDSPPELRVLDLBROKALKVLANASYGMNSG 540  
 Db 481 RCPPGPKVTLERLLELRKVRRAENKKYPPDSPPELRVLDLBROKALKVLANASYGMNSG 540

Qy 541 ARWYCRBCKAVTAWGRHLRTAINTARKUGLKIVYGGDPSLFTYDPEKVENTIKKE 600  
 Db 541 ARWYCRBCKAVTAWGRHLRTAINTARKUGLKIVYGGDPSLFTYDPEKVENTIKKE 600

Qy 601 ELGFIKIKLKVYKPLFTEAKRKYAGLLEDGRIDIVGFEAVRGDGCALAKEVOTRVETV 660  
 Db 601 ELGFIKIKLKVYKPLFTEAKRKYAGLLEDGRIDIVGFEAVRGDGCALAKEVOTRVETV 660

Qy 661 LKTSVENVKAYEVRKIVKVLBEGKPYTIEKUVIWKTSKRLBEYTTAEPVAAKEMLSAG 720  
 Db 661 LKTSVENVKAYEVRKIVKVLBEGKPYTIEKUVIWKTSKRLBEYTTAEPVAAKEMLSAG 720

Qy 721 YRVSPDKIGVYVVKGGRSISORAWYFMMWPSQDVTYDHOIIPALRILGYFGIT 780  
 Db 721 YRVSPDKIGVYVVKGGRSISORAWYFMMWPSQDVTYDHOIIPALRILGYFGIT 780

Qy 781 EKKUKSATGQKTLPLAKSK 803  
 Db 781 EKKUKSATGQKTLPLAKSK 803

RESULT 2

US-08-062-368-4

Sequence 4, Application US/08062368

Patent No. 5491086

GENERAL INFORMATION:

APPLICANT: Gelfand, David H.

APPLICANT: Wang, Alice M.

TITLE OF INVENTION: Purified Thermosable Nucleic Acid Pyrodictium Species

NUMBER OF SEQUENCES: 35

CORRESPONDENCE ADDRESS:

ADDRESSEES: Hoffmann-La Roche Inc.

STREET: 340 Kingsland Street

CITY: Nutley

STATE: New Jersey

ZIP: 07110

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

OPERATING SYSTEM: IBM PC compatible

SOFTWARE: Patentin Release #1.0, Version #1.25

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/062,368

FILING DATE: 1993/5/14

CLASSIFICATION: 435

ATTORNEY/AGENT INFORMATION:

NAME: S. ab Ph.D., Stacey R.

REGISTRATION NUMBER: 32,630

REFERENCE/DOCKET NUMBER: 8584

TELECOMMUNICATION INFORMATION:

TELEPHONE: (510) 814-2863

TELEFAX: (510) 814-2977

INFORMATION FOR SEQ ID NO: 4:

SEQUENCE CHARACTERISTICS:

LENGTH: 803 amino acids

TYPE: amino acid

STRANDEDNESS: single

TOPOLOGY: linear

MOLECULE TYPE: DNA (genomic)

US-062-368-4

Sequence 4, Application US/08062368

Patent No. 5491086

GENERAL INFORMATION:

APPLICANT: Gelfand, David H.

APPLICANT: Wang, Alice M.

TITLE OF INVENTION: Purified Thermosable Nucleic Acid Pyrodictium Species

NUMBER OF SEQUENCES: 35

CORRESPONDENCE ADDRESS:

ADDRESSEES: Hoffmann-La Roche Inc.

STREET: 340 Kingsland Street

Best Local Similarity 70.8\*, Pred. No. 1e-270:  
 Matches 570; Conservative 106; Mismatches 122; Index 7; Gaps 5;

Qy 1 MTEVV-FTVLSSMSYEVKGRPQVILGIAENGRVVLDSFRPYVYALLAPGADP-KO 57.  
 Db 1 MTEVV-FTVLSSMSYEVKGRPQVILGIAENGRVVLDSFRPYVYALLAPGADP-KO 57.

Qy 58 VAGORIRALSRPKSPICLGVEDDERRKKGPRPRRIRVLPARVEREVLVNGDVEVL 117  
 Db 61 IASIRIRLUVVKSPIDAKPLDKYFORPRCKVITMIPESVRHVTREAVKKELEGEDSL 120

Qy 118 EADTRFAMYVLLDHLPLFTWTRVLEPLENGNGFRUDKVLYKSREPLVGEALATKL 177  
 Db 121 EADTRFAMYVLLDHLPLFTWTRVLEPLENGNGFRUDKVLYKSREPLVGEALATKL 177

Qy 178 PDLRILAFDIEVVKSKQSPRPRDPVVIAKVDDGDBVLFTAGKDKDRKPRFREVYK 237  
 Db 179 PPRFLVADIEVSVRSQSPNPARDPVIISLRDSEGERLIEAGHDORRVRREFEVYR 238

Qy 238 RYDIDTGYNNHDFWYDYLMEARRGGINLDVTRVGRBEPITSVICHVSVQCRNDLY 297  
 Db 239 APFDIDTGYNSHDFWYDYLMEARRGGINLDVTRVGRBEPITSVICHVSVQCRNDLY 298

Qy 298 DYBEMPEPIKIKSLEEVAYLGMKMKSSERVITINWEPDYMWDPSKREPLLIQYARDYRA 357  
 Db 299 DYAZEMPEPIKIKSLEEVAYLGMKMKSSERVITINWEPDYMWDPSKREPLLIQYARDYRA 358

Qy 358 TYSLAEKULPFAQLSYTGVLQDVGAMSVERLEVLIRAKMCELVPLRWTLYMRAQDNLVPLNVERGES 418  
 Db 359 TYGLAEKULPFAQLSYTGVLQDVGAMSVERLEVLIRAKMCELVPLRWTLYMRAQDNLVPLNVERGES 418

Qy 418 YRGAVLVERPLRGHENIAVLDSSMSYNNIMIKRNGPDTLVRGKCGC-GCWEAEVK 476  
 Db 419 YKGAIVVPLRGHENIAVLDSSMSYNNIMIKRNGPDTLVRGKCGC-GCWEAEVK 476

Qy 477 HRFRCPGPKVTLERLLELRKVRRAENKKYPPDSPPELRVLDLBROKALKVLANASYGM 536  
 Db 479 HRFRCPGPKVTLERLLELRKVRRAENKKYPPDSPPELRVLDLBROKALKVLANASYGM 536

Qy 537 GWSGARMVCRECKAVTAWGRHLRTAINTARKUGLKIVYGGDPSLFTYDPEKVENTIKKE 596  
 Db 539 GWSHARWYCKRCAEAUTAWGRHLRTAINTARKUGLKIVYGGDPSLFTYDPEKVENTIKKE 598

Qy 597 LKELBLGFIKIKLKVYKPLFTEAKRKYAGLLEDGRIDIVGFEAVRGDGCALAKEVOTKV 656  
 Db 599 FVEELGFIKIKLKVYKPLFTEAKRKYAGLLEDGRIDIVGFEAVRGDGCALAKEVOTKV 658

Qy 657 VEYVLTSEVENVKAYEVRKIVKVLBEGKPYTIEKUVIWKTSKRLBEYTTAEPVAAKEM 716  
 Db 659 AETVINTGNDKATSYREVKLRBEGKPYTIEKUVIWKTSKRLBEYTTAEPVAAKEM 716

Qy 717 LSGYRVSPDKIGVYVVKGGRSISORAWYFMMWPSQDVTYDHOIIPALRILGY 776  
 Db 719 KEAGYEVSPDKIGVYVVKGGRSISORAWYFMMWPSQDVTYDHOIIPALRILSY 777

Qy 777 FGTTERKUKSATGQKTLPLAKSK 801  
 Db 778 FGVTEKUKSATGQKTLPLAKSK 802

RESULT 3

US-08-062-368-2

Sequence 2, Application US/08062368

Patent No. 5491086

GENERAL INFORMATION:

APPLICANT: Gelfand, David H.

APPLICANT: Wang, Alice M.

TITLE OF INVENTION: Purified Thermosable Nucleic Acid Pyrodictium Species

NUMBER OF SEQUENCES: 35

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